AMENDMENTS TO THE ABSTRACT:

Please delete lines 4 and 5 of the Abstract, as follows:

ABSTRACT

~~"APPARATUS AND METHODS FOR~~

~~DETECTING NUCLEIC ACID IN BIOLOGICAL SAMPLES"~~

There are disclosed apparatus and methods for the field-assisted acceleration of biological processes involving charged entities, including in particular the detection of target DNA in a biological sample. A reaction cell is provided with a dielectric surface, and a field is generated by inducing charge-separation in the dielectric material by applying a potential to an electrode in contact with the dielectric material.